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(FILE 'HOME' ENTERED AT 15:15:48 ON 13 FEB 2007)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS,
LIFESCI' ENTERED AT 15:16:28 ON 13 FEB 2007

E BERAUD C/AU

L1 129 S E9
L2 1307 S ASTRAL (W) MICROTUBUL?
L3 0 S L1 AND L2
L4 18079 S DIVIDING (W) CELL?
L5 0 S L1 AND L2
L6 0 S L1 AND L4
L7 27432 S DISTAL (W) END
L8 0 S L1 AND L7
L9 3202 S KIF##
L10 7 S L1 AND L9
L11 7 DUP REM L10 (0 DUPLICATES REMOVED)
E WIEMANN S/AU
L12 153 S E7
L13 0 S L2 AND L12
L14 0 S L7 AND L12
L15 24219 S GROWTH (A) CONE
L16 0 S L1 AND L15
E PEREIRA A/AU
L17 1277 S E3
E WENTWORTH D B/AU
L18 34 S E3
E GANDHI R/AU
L19 300 S E3
L20 1605 S L17 OR L18 OR L19
L21 1 S L20 AND L9
L22 15 S PROPHASE (W) CENTROMERE
L23 0 S (L12 OR L1) AND L22

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=> file medline embase biosis biotechds scisearch hcplus nti slifesci
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FILE 'LIFESCI' ENTERED AT 15:16:28 ON 13 FEB 2007
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E1	9	BERAUD ALEXANDRE/AU
E2	9	BERAUD B/AU
E3	507 -->	BERAUD C/AU
E4	1	BERAUD C L/AU
E5	9	BERAUD CASSEL A M/AU
E6	3	BERAUD CATHERINE/AU
E7	1	BERAUD CEDRIC FRANCIS/AU
E8	1	BERAUD CH J/AU
E9	129	BERAUD CHRISTOPHE/AU
E10	4	BERAUD CL/AU
E11	1	BERAUD CLAUDIO/AU
E12	21	BERAUD COLOMB E/AU

=> s e9
L1 129 "BERAUD CHRISTOPHE" /AU

=> s astral (w) microtubul?
L2 1307 ASTRAL (W) MICROTUBUL?

=> s l1 and l2
L3 0 L1 AND L2

=> s dividing (w)cell?
L4 18079 DIVIDING (W) CELL?

=> s l1 and l2
L5 0 L1 AND L2

=> s l1 and l4.
L6 0 L1 AND L4

=> s distal (w)end
L7 27432 DISTAL (W) END

=> s l1 and l7
L8 0 L1 AND L7

=> s KIF##
L9 3202 KIF##

=> s l1 and l9
L10 7 L1 AND L9

=> dup rem l10
PROCESSING COMPLETED FOR L10
L11 7 DUP REM L10 (0 DUPLICATES REMOVED)

=> d 1-7 ibib ab

L11 ANSWER 1 OF 7 HCPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:667365 HCPLUS
DOCUMENT NUMBER: 139:209659
TITLE: Identification, sequence and drug screening use of
human kinesin motor protein HsKifC2
INVENTOR(S): Beraud, Christophe; Freedman, Richard
PATENT ASSIGNEE(S): Cytokinetics, Inc., USA
SOURCE: U.S., 27 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6610525	B1	20030826	US 2000-721251	20001122
US 6706489	B1	20040316	US 2002-114764	20020402

PRIORITY APPLN. INFO.: US 2000-721251 A1 20001122
AB The present invention is based on the discovery of a new human kinesin
motor protein, HsKifC2, the polynucleotide encoding HsKifC2, and the use
of these compns. for the diagnosis, treatment, or prevention of cancer,
neurol. disorders, and disorders of vesicular transport. The invention
provides isolated nucleic acid and amino acid sequences of HsKifC2,
antibodies to HsKifC2, methods of screening for HsKifC2 modulators using
biol. active HsKifC2, and kits for screening for HsKifC2 modulators. A
drug screening assay based on a microtubule-stimulated ATPase activity of
HsKifC2 is disclosed.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 7 HCPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2002:654999 HCPLUS
 DOCUMENT NUMBER: 137:197521
 TITLE: High throughput screening systems for identifying modulators of microtubule-stimulated ATPase activity of kinesin motor proteins
 INVENTOR(S): Beraud, Christophe; Finer, Jeffrey T.;
 Sakowicz, Roman; Wood, Kenneth W.
 PATENT ASSIGNEE(S): Cytokinetics, Inc., USA
 SOURCE: U.S., 34 pp.
 CODEN: USXXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6440684	B1	20020827	US 2000-592054	20000612
			US 2000-592054	20000612
PRIORITY APPLN. INFO.:				
AB The present invention provides high throughput screening systems for identifying compds. that modulate the activity of target proteins having motor domains and microtubule-stimulated ATPase activity. These compds. are useful in the treatment of cellular proliferation disorders. The method can be performed in plurality simultaneously with fluorescence or absorbance readouts. In one embodiment the target protein is human kinesin Kif4 (HsKif4) or HsKif4 construct.				
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L11 ANSWER 3 OF 7 HCPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2002:570671 HCPLUS
 DOCUMENT NUMBER: 137:121353
 TITLE: Identification, sequence and drug screening use of a human kinesin HsKif12a
 INVENTOR(S): Beraud, Christophe; Freedman, Richard
 PATENT ASSIGNEE(S): Cytokinetics, Inc., USA
 SOURCE: U.S., 19 pp., Cont. of U.S. Ser. No. 632,155.
 CODEN: USXXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6426207	B1	20020730	US 2000-723430	20001127
US 6429005	B1	20020806	US 2000-632155	20000803
			US 2000-632155	A1 20000803
PRIORITY APPLN. INFO.:				
AB The discovery of a new kinesin motor protein which is the human ortholog of mouse kinesin Kif12 is disclosed. The invention provides isolated cDNA and amino acid sequences of the human HsKif12a, antibodies to HsKif12a, methods of screening for HsKif12a modulators using biol. active HsKif12a, and kits for screening for HsKif12a modulators. The assay for HsKif12a based on detection of ADP production from microtubule stimulated ATPase of HsKif12a is proposed.				
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L11 ANSWER 4 OF 7 HCPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2002:403847 HCPLUS
 DOCUMENT NUMBER: 137:2234
 TITLE: Cloning, characterization and use of a novel human kinesin motor protein HsKifC2

INVENTOR(S): Beraud, Christophe; Freedman, Richard
 PATENT ASSIGNEE(S): Cytokinetics, Inc., USA
 SOURCE: U.S., 27 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6395540	B1	20020528	US 2000-721137	20001122
WO 2002079479	A2	20021010	WO 2001-US43596	20011116
WO 2002079479	A3	20031023		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001297707	A1	20021015	AU 2001-297707	20011116
EP 1373520	A2	20040102	EP 2001-273522	20011116
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2004161755	A1	20040819	US 2003-432424	20031126
PRIORITY APPLN. INFO.: US 2000-721137 A 20001122 WO 2001-US43596 W 20011116				

AB The invention provides isolated cDNA and amino acid sequences of a new human kinesin motor protein, HsKifC2, antibodies to HsKifC2, methods of screening for HsKifC2 modulators using biol. active HsKifC2, and kits for screening for HsKifC2 modulators. The kinesin HsKifC2 comprises a motor domain and has microtubule-stimulated ATPase activity.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 7 HCPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2002:114032 HCPLUS
 DOCUMENT NUMBER: 136:146891
 TITLE: Human kinesin motor protein HsKif6 and its use in diagnosis and treatment of cancer, neurological disease and vesicular transport disorders
 INVENTOR(S): Beraud, Christophe; Freedman, Richard
 PATENT ASSIGNEE(S): Cytokinetics, Inc., USA
 SOURCE: U.S., 20 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6346410	B1	20020212	US 2000-637481	20000811
US 6416966	B1	20020709	US 2000-723428	20001127
US 6492158	B1	20021210	US 2000-724520	20001127
US 2000-637481 A1 20000811				
PRIORITY APPLN. INFO.:				
AB The invention provides isolated nucleic acid and amino acid sequences of human kinesin motor protein HsKif6. In another embodiment, antibodies to HsKif6, methods of screening for HsKif6 modulators using biol. active HsKif6, and kits for screening for HsKif6 modulators are provided. The				

hsKif6 protein has uses in the diagnosis and treatment of cellular proliferation disorders including cancer, hyperplasias, restenosis, cardiac hypertrophy, immune disorders and inflammation.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:6347 HCAPLUS
DOCUMENT NUMBER: 136:81691
TITLE: Sequence, characterization and use of a novel human kinesin motor protein HsKifC2
INVENTOR(S): Beraud, Christophe; Freedman, Richard
PATENT ASSIGNEE(S): Cytokinetics, Inc., USA
SOURCE: U.S., 27 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6335189	B1	20020101	US 2000-721383	20001122
PRIORITY APPLN. INFO.:			US 2000-721383	20001122

AB The invention provides isolated cDNA and amino acid sequences of a novel human kinesin motor protein, HsKifC2, antibodies to HsKifC2, methods of screening for HsKifC2 modulators using biol. active HsKifC2, and kits for screening for HsKifC2 modulators. The kinesin HsKifC2 comprises a motor domain and has microtubule-stimulated ATPase activity. The qual. tissue expression profile of HsKifC2 in variety of tissues is shown.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:915044 HCAPLUS
DOCUMENT NUMBER: 136:50046
TITLE: Cloning, sequence and use of human kinesin HsKif9
INVENTOR(S): Beraud, Christophe; Freedman, Richard
PATENT ASSIGNEE(S): Cytokinetics, Inc., USA
SOURCE: U.S., 27 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6331430	B1	20011218	US 2000-634957	20000808
US 6355447	B1	20020312	US 2000-723153	20001127
US 6387679	B1	20020514	US 2000-723429	20001127
WO 2002012541	A2	20020214	WO 2001-US24919	20010807
WO 2002012541	A3	20050721		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2001083207	A5	20020218	AU 2001-83207	20010807
US 2005074859	A1	20050407	US 2003-344113	20030902

PRIORITY APPLN. INFO.: US 2000-634957 A1 20000808
WO 2001-US24919 W 20010807

AB The invention provides isolated nucleic acid and amino acid sequences of a new human kinesin motor protein, HsKif9, antibodies to HsKif9, methods of screening for HsKif9 modulators using biol. active HsKif9, and kits for screening for HsKif9 modulators.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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E BERAUD C/AU

L1 129 S E9
L2 1307 S ASTRAL (W) MICROTUBUL?
L3 0 S L1 AND L2
L4 18079 S DIVIDING (W)CELL?
L5 0 S L1 AND L2
L6 0 S L1 AND L4
L7 27432 S DISTAL (W)END
L8 0 S L1 AND L7
L9 3202 S KIF##
L10 7 S L1 AND L9
L11 7 DUP REM L10 (0 DUPLICATES REMOVED)

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E1 1 WIEMANN ROMAN/AU
E2 1 WIEMANN ROSEMARIE/AU
E3 321 --> WIEMANN S/AU
E4 23 WIEMANN S U/AU
E5 2 WIEMANN SABINE/AU
E6 1 WIEMANN SANDRA/AU
E7 153 WIEMANN STEFAN/AU
E8 4 WIEMANN STEFANIE/AU
E9 9 WIEMANN STEFANIE U/AU
E10 1 WIEMANN STEFFAN/AU
E11 1 WIEMANN STEFFANIE/AU
E12 3 WIEMANN STEPHANIE U/AU

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L12 153 "WIEMANN STEFAN"/AU

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FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 15:16:28 ON 13 FEB 2007

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L5 0 S L1 AND L2
L6 0 S L1 AND L4
L7 27432 S DISTAL (W)END
L8 0 S L1 AND L7
L9 3202 S KIF##
L10 7 S L1 AND L9
L11 7 DUP REM L10 (0 DUPLICATES REMOVED)

E WIEMANN S/AU
 L12 153 S E7

=> s 12 and l12
 L13 0 L2 AND L12

=> s 17 and l12
 L14 0 L7 AND L12

=> s growth (a)cone
 L15 24219 GROWTH (A) CONE

=> s 11 and l15
 L16 0 L1 AND L15

=> e pereira a/au

E1	1	PEREIR M/AU
E2	10	PEREIRA/AU
E3	1277	--> PEREIRA A/AU
E4	1	PEREIRA A */AU
E5	115	PEREIRA A A/AU
E6	5	PEREIRA A A C/AU
E7	2	PEREIRA A A D/AU
E8	2	PEREIRA A A DA SILVA/AU
E9	1	PEREIRA A A F/AU
E10	1	PEREIRA A A JR/AU
E11	4	PEREIRA A A M/AU
E12	11	PEREIRA A A S/AU

=> s e3
 L17 1277 "PEREIRA A"/AU

=> e wentworth d b/au

E1	156	WENTWORTH D/AU
E2	7	WENTWORTH D A/AU
E3	34	--> WENTWORTH D B/AU
E4	50	WENTWORTH D E/AU
E5	18	WENTWORTH D F/AU
E6	1	WENTWORTH D H/AU
E7	2	WENTWORTH D K/AU
E8	78	WENTWORTH D N/AU
E9	1	WENTWORTH D R/AU
E10	2	WENTWORTH D S/AU
E11	2	WENTWORTH D T/AU
E12	4	WENTWORTH D W/AU

=> s e3
 L18 34 "WENTWORTH D B"/AU

=> e gandhi r/au

E1	1	GANDHI PUNIT/AU
E2	4	GANDHI PURVEE/AU
E3	300	--> GANDHI R/AU
E4	15	GANDHI R A/AU
E5	25	GANDHI R B/AU
E6	19	GANDHI R C/AU
E7	1	GANDHI R D/AU
E8	7	GANDHI R G/AU
E9	36	GANDHI R H/AU
E10	108	GANDHI R K/AU
E11	4	GANDHI R L/AU
E12	3	GANDHI R M/AU

=> s e3

L19 300 "GANDHI R"/AU

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L5 0 S L1 AND L2
L6 0 S L1 AND L4
L7 27432 S DISTAL (W) END
L8 0 S L1 AND L7
L9 3202 S KIF##
L10 7 S L1 AND L9
L11 7 DUP REM L10 (0 DUPLICATES REMOVED)
E WIEMANN S/AU
L12 153 S E7
L13 0 S L2 AND L12
L14 0 S L7 AND L12
L15 24219 S GROWTH (A) CONE
L16 0 S L1 AND L15
E PEREIRA A/AU
L17 1277 S E3
E WENTWORTH D B/AU
L18 34 S E3
E GANDHI R/AU
L19 300 S E3

=> s l17 or l18 or l19

L20 1605 L17 OR L18 OR L19

=> s l20 and l9

L21 1 L20 AND L9

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L21 ANSWER 1 OF 1 BIOTECHDS COPYRIGHT 2007 THE THOMSON CORP. on STN

ACCESSION NUMBER: 2005-04001 BIOTECHDS

TITLE: Identifying compound that modulates activity of KIF18A or
KLP67A polypeptide by incubating cell containing KIF18A or
KLP67A polypeptide with test compound, and detecting altered
localization of KIF18A or KLP67A polypeptide in cell;
involving vector-mediated gene transfer and expression in
host cell for therapy

AUTHOR: PEREIRA A; WENTWORTH D B; GANDHI
R

PATENT ASSIGNEE: PEREIRA A; WENTWORTH D B; GANDHI R

PATENT INFO: US 2004241760 2 Dec 2004

APPLICATION INFO: US 2003-735972 15 Dec 2003

PRIORITY INFO: US 2003-735972 15 Dec 2003; US 2002-433098 13 Dec 2002

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2005-046407 [05]

AB DERWENT ABSTRACT:

NOVELTY - Identifying compound that modulates activity of kinesin
superfamily (KIF)18A or KLP67A polypeptide, comprising
obtaining test and control cell containing KIF18A or KLP67A polypeptide,
incubating the test cell with a compound, and detecting an altered
localization of the KIF18A or KLP67A polypeptide in the test cell as

compared to the KIF18A or KLP67A polypeptide in the control cell, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) identifying (M2) a compound that modulates expression of a KIF18A or KLP67A DNA sequence, comprising: (a) providing a test cell and a control cell containing a nucleic acid that expresses the KIF18A or KLP67A polypeptide; (b) incubating the test cell with a test compound; and (c) detecting an increase or decrease in a KIF18A or KLP67A RNA or polypeptide population as compared to a KIF18A or KLP67A RNA or polypeptide population in a control cell, where an increase or decrease in the KIF18A or KLP67A population indicates that expression of the KIF18A or KLP67A DNA is modulated by the test compound; (2) assaying (M3) for modulation of activity of a KIF18A polypeptide in a test cell, comprising: (a) providing a dividing test cell containing a KIF18A polypeptide and a dividing control cell containing a KIF18A polypeptide; (b) measuring spindle length in the dividing test cell and the dividing control cell; and (c) determining either the amount of KIF18A polypeptide in the test cell and the control cell, or the location of KIF18A polypeptide in the test cell and the control cell, or both, where the occurrence of a longer or shorter spindle in the test cell as compared to the control cell, and either the amount of KIF18A polypeptide is different than the amount of KIF18A polypeptide in the control cell, or the location of KIF18A polypeptide in the test cell is different than the location of KIF18A polypeptide in the control cell, or both, is an indication that the activity of the KIF18A polypeptide in the test cell is different than the activity of a KIF18A polypeptide in the control cell; (3) assaying (M8) for modulation of activity of a KIF18A polypeptide in a test cell, comprising: (a) providing a dividing test cell containing a KIF18A polypeptide and a dividing control cell containing a KIF18A polypeptide; (b) measuring the angle between two ectopically localized prophase centrosomes in the dividing test cell; and (c) determining either the amount of KIF18A polypeptide in the test cell and the control cell, or the location of KIF18A polypeptide in the test cell and the control cell, or both, where the occurrence of a 1-55degrees angle between the two prophase centrosomes in the dividing cell, and either the amount of KIF18A polypeptide is different than the amount of KIF18A polypeptide in the control cell, or the location of KIF18A polypeptide in the test cell is different than the location of KIF18A polypeptide in the control cell, or both, indicates that the activity of the KIF18A polypeptide in the test cell is different than the activity of a KIF18A polypeptide in the control cell; (4) assaying (M9) for modulation of activity of a KIF18A polypeptide in a test cell, comprising: (a) providing a dividing test cell containing KIF18A polypeptide and a dividing control cell containing a KIF18A polypeptide; (b) determining the shape of a spindle or astral microtubule in the dividing test cell and control cell; and (c) determining either the amount of KIF18A polypeptide in the test cell and the control cell, or the location of KIF18A polypeptide in the test cell and the control cell, or both, where the occurrence of a spindle or astral microtubule in the dividing test cell that is shaped differently than a spindle or astral microtubule in the control test cell, and either the amount of KIF18A polypeptide is different than the amount of KIF18A polypeptide in the control cell, or the location of KIF18A polypeptide in the test cell is different than the location of KIF18A polypeptide in the control cell, or both, indicates that the activity of the KIF18A polypeptide in the test cell is different than the activity of a KIF18A polypeptide in the control cell; (5) assaying (M4) for modulation of expression of KIF18A, comprising: (a) providing a test cell containing a KIF18A nucleic acid and a control cell containing a KIF18A nucleic acid; and (b) determining a level of an RNA encoding by the KIF18A nucleic acid in the test and the control cell, where an increase or decrease in the level of RNA encoded by the KIF18A nucleic acid in the test cell compared to the level of RNA encoded by the KIF18A nucleic acid in the control cell indicates that the expression of a KIF18A nucleic acid is modulated, or the method optionally involves providing a test cell containing KIF18A

nucleic acid and a control cell containing a KIF18A nucleic acid and determining a level of KIF18A polypeptide encoded by the KIF18A nucleic acid in the test cell and the control cell, where an increase or decrease in the level of KIF18A polypeptide encoded by the KIF18A nucleic acid in the test cell compared to the level of polypeptide encoded by the KIF18A nucleic acid in the control cell indicated that expression of the KIF18A nucleic acid is modulated; (6) modulating (M5) the activity of a KIF18A polypeptide or KLP67A polypeptide; (7) a composition (C1) comprising an antisense nucleic acid molecule, siRNA, ribozyme, triple helix molecule, antibody, small inorganic molecule or small non-nucleic acid organic molecule that modulates the activity of KIF18A polypeptide; and (8) a kit (K1) comprising (C1) and instructions to treat a disorder mediated by or associated with a KIF18A polypeptide.

BIOTECHNOLOGY - Preferred Method: In (M1), the KIF18A polypeptide has the sequence of GenBank Accession number AL136819, comprising 898 amino acids fully defined in specification. The KLP67A polypeptide has the sequence of GenBank Accession number NM079268, comprising 814 amino acids fully defined in specification. The test compound is an antisense nucleic acid molecule, a small inhibitory RNA (SiRNA), a ribozyme, a triple helix molecule, an antibody, a polypeptide, a peptide, a polypeptide mimetic, a small inorganic molecule, or a small non-nucleic acid organic molecule. The polypeptide is localized to a region of a dividing cell other than the distal ends of astral microtubules in the presence of the test compound. The polypeptide is localized using immunocytochemistry. The polypeptide is fused to a reporter molecule chosen from green fluorescent protein (GFP), beta-glucuronidase (GUS), luciferase, chloramphenicol transacetylase (CAT), horseradish peroxidase (HRP) and beta galactosidase. In (M2), the increase or decrease in the RNA population is assayed by Northern blot, reverse transcriptase (RT)-PCR, or microarray analysis. The increase or decrease in the KIF18A or KLP67A polypeptide population is assayed by Western blot or enzyme linked immunosorbent assay (ELISA). In (M3), the spindle length of the test cell is increased or decreased by 45-100 %, as compared to the spindle length of the control cell. (M3) further involves determining whether KIF18A polypeptide from the test cell contains an altered amino acid compared to a wild type KIF18A polypeptide. In (M8), the angle between the two prophase centrosomes in the dividing test cell ranges from 130-154 degrees. The centrosomes are localized by using an anti-centrosomin antibody and immunocytochemistry. (M9) further involves determining whether a KIF18A polypeptide from the test cell contains an altered amino acid compared to a wild-type KIF18A polypeptide. In (M3)-(c), the spindle or astral microtubule in the diving test cell is banana-shaped. The spindle or astral microtubule is detected using an anti-alpha-tubulin antibody and immunocytochemistry. (M3)-(b) further involves determining whether a KIF18A polypeptide from the test cell contains an altered amino acid compared to a wild-type KIF18A polypeptide. In (M4), the level of RNA is monitored by Northern blot, RT-PCR, or microarray analysis. (M4) further involves determining whether the KIF18A nucleic acid from the test cell contains a mutation. The level of KIF18A polypeptide in the test cell and in the control cell is determined by Western blot or ELISA. (M5) comprises: (a) contacting a KIF18A nucleic acid or KLP67A nucleic acid with a modulating agent in a concentration sufficient to modulate transcription of the nucleic acid; (b) contacting a cell expressing a KIF18A nucleic acid or KLP67A nucleic acid with the modulating agent in a concentration sufficient to modulate translation from an RNA encoded by the nucleic acid; or (c) contacting a cell expressing the KIF18A polypeptide or KLP67A polypeptide with the compound that binds to the polypeptide in a concentration sufficient to modulate the activity of the polypeptide. In (M5), the modulating agent is an antisense nucleic acid molecule, siRNA, a ribozyme, a triple helix molecule, an antibody, a small inorganic molecule, or a small non-nucleic acid organic molecule. Preferred Composition: In (C1), the antisense nucleic acid molecule is complementary to a segment of contiguous nucleotides of a KIF18A nucleotide sequence ranging from a length of

10-1000 nucleotides. The siRNA comprises 521 base pair fully defined in specification or its fragment. The antibody or small molecule specifically binds to a KIF18A polypeptide, or its fragment or allelic variant.

ACTIVITY - Cytostatic; Immunosuppressive; Antiarthritic; Antirheumatic; Antipsoriatic.

MECHANISM OF ACTION - Modulator of KIF18A activity (claimed). No supporting data is given.

USE - (M1) is useful for identifying a compound that modulates activity of a kinesin superfamily (KIF)18A or KLP67A (ortholog of KIF18A) polypeptide. (M2) is useful for identifying a compound that modulates expression of a KIF18A or KLP67A DNA sequence. (M5) is useful for modulating the activity of a KIF18A polypeptide or KLP67A polypeptide. (C1) is useful for modulating the activity of KIF18A. In (K1), the instruction is for treating a disorder chosen from proliferation disorder and an autoimmune disorder. The proliferation disorder is a cancer or psoriasis. The autoimmune disorder is rheumatoid arthritis. (All claimed.) (C1) is useful for treating a disorder chosen from proliferation disorder and an autoimmune disorder. (50 pages)

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FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 15:16:28 ON 13 FEB 2007

E BERAUD C/AU

L1 129 S E9
L2 1307 S ASTRAL (W) MICROTUBUL?
L3 0 S L1 AND L2
L4 18079 S DIVIDING (W) CELL?
L5 0 S L1 AND L2
L6 0 S L1 AND L4
L7 27432 S DISTAL (W) END
L8 0 S L1 AND L7
L9 3202 S KIF##
L10 7 S L1 AND L9
L11 7 DUP REM L10 (0 DUPLICATES REMOVED)
E WIEMANN S/AU

L12 153 S E7
L13 0 S L2 AND L12
L14 0 S L7 AND L12
L15 24219 S GROWTH (A) CONE
L16 0 S L1 AND L15
E PEREIRA A/AU
L17 1277 S E3
E WENTWORTH D B/AU
L18 34 S E3
E GANDHI R/AU
L19 300 S E3
L20 1605 S L17 OR L18 OR L19
L21 1 S L20 AND L9

=> s prophase (w)centromere

L22 15 PROPHASE (W) CENTROMERE

=> s (l12 or l1) and l22

L23 0 (L12 OR L1) AND L22

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L21 1 S L20 AND L9
L22 15 S PROPHASE (W) CENTROMERE
L23 0 S (L12 OR L1) AND L22

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3	20060105	447	US 2006000332 2 A1	Bioinformatically detectable group of novel regulatory genes and uses thereof
4	20051013	25	US 2005022799 9 A1	Diarylamine derivatives as calcium channel blockers
5	20050728	41	US 2005016506 5 A1	N-type calcium channel blockers
6	20041202	50	US 2004024176 0 A1	Kinesin-like proteins and methods of use
7	20040617	107	US 2004011568 7 A1	Cell adhesion and extracellular matrix proteins
8	20040318	207	US 2004005382 4 A1	Extracellular matrix and cell adhesion molecules

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13	L13	619	BERAUD WIEMANN
14	L14	0	13 and 113

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2	20060105	447	US 2006000332 2 A1	Bioinformatically detectable group of novel regulatory genes and uses thereof
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4	20050310	44	US 2005005404 1 A1	Kini-3 motor protein and methods for its use
5	20041202	50	US 2004024176 0 A1	Kinesin-like proteins and methods of use
6	20041118	38	US 2004022930 8 A1	Novel motor proteins and methods for their use
7	20041118	38	US 2004022923 8 A1	Novel motor proteins and methods for their use
8	20041014	13	US 2004020300 6 A1	Novel beta-tubulin protein of Candida glabrata and methods for its use
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18	20030306	19	US 2003004490 0 A1	Human kinesins and methods of producing and purifying human kinesins
19	20030220	31	US 2003003607 5 A1	KinI-3 motor protein and methods for its use
20	20020815	39	US 2002011088 3 A1	Novel motor proteins and methods for their use
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22	20051011	12	US 6953661 B1	Method of preventing transport of a neurotropic virus and identifying agents for achieving same
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24	20040928	21	US 6797484 B1	Motor proteins and methods for their use
25	20040921	42	US 6794178 B2	Kini-3 motor protein and methods for its use
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34	20030826	27	US 6610525 B1	Motor proteins and methods for their use
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36	20030513	24	US 6562610 B1	Motor proteins and methods for their use
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40	20030318	25	US 6534309 B1	Motor proteins and methods for their use
41	20030204	42	US 6514738 B1	KinI-3 motor protein and methods for its use
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43	20021210	24	US 6492151 B1	Motor proteins and methods for their use

44	20021008	21	US 6461855 B1	Motor proteins and methods for their use
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46	20020910	30	US 6448026 B1	Screening assays for modulators of human kinesin protein HsKrp5
47	20020910	31	US 6448025 B1	Motor proteins and methods for their use
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49	20020827	30	US 6440685 B1	Screening assays for modulators of human kinesin protein HsKif16b
50	20020827	34	US 6440684 B1	Methods of identifying modulators of kinesin motor proteins
51	20020820	21	US 6436686 B1	Motor proteins and methods for their use
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53	20020813	21	US 6432659 B1	Motor proteins and methods for their use
54	20020806	19	US 6429005 B1	Motor proteins and methods for their use
55	20020730	19	US 6426207 B1	Motor proteins and methods for their use
56	20020730	34	US 6426193 B1	Screening assays for modulators of human kinesin protein HsKif21b
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60	20020528	27	US 6395540 B1	Nucleic acids encoding HsKifC2, a kinesin motor protein
61	20020528	24	US 6395527 B1	Motor proteins and methods for their use
62	20020521	21	US 6391613 B1	Motor proteins and methods for their use
63	20020521	20	US 6391601 B1	Motor proteins and methods for their use
64	20020521	19	US 6391573 B1	Screening assays for modulators of human kinesin protein HSKIP3B
65	20020514	27	US 6387679 B1	Motor proteins and method for their use
66	20020514	26	US 6387644 B1	Motor proteins and methods for their use
67	20020507	33	US 6383796 B1	Nucleic acids encoding HSKIF21B, a kinesin motor protein
68	20020430	29	US 6379941 B1	Human kinesin-related protein HsKrp5
69	20020430	31	US 6379912 B1	Motor proteins and method for their use
70	20020409	19	US 6368841 B1	Human kinesin-related protein HsKip3b
71	20020326	21	US 6361993 B1	Human HSET motor proteins and methods for their use

72	20020312	28	US 6355471 B1	Nucleic acids encoding Hskif16b, a kinesin motor protein
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74	20020312	27	US 6355447 B1	Motor proteins and methods for their use
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76	20020101	27	US 6335189 B1	Motor proteins and methods for their use
77	20011225	27	US 6333184 B1	Motor proteins and methods for their use
78	20011218	27	US 6331430 B1	Motor proteins and methods for their use
79	20011218	44	US 6331424 B1	Motor proteins and methods for their use
80	20010925	19	US 6294371 B1	Motor proteins and methods for their use